

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-21. (Canceled)

22. (Currently Amended) A method for plugging a well having a bottom, a length and an opening at a surface comprising:

- a. introducing a plurality of nodules into the well, said nodules comprising bentonite in admixture with a proportion of water to permit the formation of compacted nodules having a density of at least 2.0 g/cm^3 , and a mean particle survival at a crush force of at least 800 newtons and capable of having at least 50% survival when dropped 1.5 meters onto a concrete surface,
- b. permitting the introduced nodules to come in contact with additional water, in an amount and for a time adequate to cause the nodules to swell and form a substantially hydraulically solid plug in the well.

23. (Original) The method of claim 22 wherein said nodules are introduced into the bottom of the well by falling from said opening to said bottom.

24. (Original) The method of claim 22 wherein said nodules are introduced over the length of the well.

25. (Original) The method of claim 22 wherein said nodules are introduced over at least one portion of the length of the well and wherein nonbentonite material is introduced into at least one other portion of the length of the well.

26. (Original) The method of claim 22 wherein heat is introduced into the well.

27. (Original) The method of claim 22 wherein the well contains viscous material and wherein hot water is introduced into the well to reduce the viscosity of said viscous material.

28. (Previously Presented) The method of claim 27 wherein the hot water is introduced into the well prior to introducing the nodules.

29. (Original) The method of claim 22 wherein the well contains saline water.

30. (Currently Amended) ~~The method of claim 29~~ A method for plugging a well containing saline water and having a bottom, a length and an opening at a surface comprising:

a. introducing a plurality of nodules into the well, said nodules comprising (a) bentonite in admixture with a proportion of water to permit the formation of compacted nodules having a density of at least 2.0 g/cm³, and a mean particle survival at a crush force of at least 800 newtons and capable of having at least 50% survival when dropped 1.5 meters onto a concrete surface; and (b) wherein the nodules contain additional water to compensate for the salinity in the saline water[.]; and

b. permitting the introduced nodules to come in contact with the saline water in the well, in an amount and for a time adequate to cause the nodules to swell and form a substantially hydraulically solid plug in the well.

31. (Currently Amended) ~~The method of claim 22~~ A method for plugging a well having a bottom, a length and an opening at a surface comprising:

a. introducing a plurality of nodules into the well, said nodules comprising bentonite in admixture with a proportion of water to permit the formation of compacted nodules having a density of at least 2.0 g/cm³, and a mean particle survival at a crush force of at least 800 newtons and capable of having at least 50% survival when dropped 1.5 meters onto a concrete surface,

wherein the compacted nodules are substantially pillow shaped with a largest cross sectional dimension of from about 1 inch to about 6 inches[.]; and

b. permitting the introduced nodules to come in contact with additional water, in an amount and for a time adequate to cause the nodules to swell and form a substantially hydraulically solid plug in the well.

32. (Original) The method of claim 22 wherein the compacted nodules are in the form of spheres having a diameter of from about 1 inch to about 6 inches.

33. (Currently Amended) ~~The method of claim 22 where~~ A method for plugging a well having a bottom, a length and an opening at a surface comprising:

a. introducing a plurality of nodules into the well, said nodules comprising bentonite in admixture with a proportion of water to permit the formation of compacted nodules having a density of at least 2.0 g/cm³, and a mean particle survival at a crush force of at least 800 newtons and capable of having at least 50% survival when dropped 1.5 meters onto a concrete surface, wherein the compacted nodules are in the form of flattened spheres having a major diameter of from about 1 inch to about 6 inches and a minor diameter which is from about 0.99 to 0.50 times the major diameter[.]; and

b. permitting the introduced nodules to come in contact with additional water, in an amount and for a time adequate to cause the nodules to swell and form a substantially hydraulically solid plug in the well.

34. (New) The method of claim 30, wherein said nodules are introduced into the bottom of the well by falling from said opening to said bottom.

35. (New) The method of claim 30, wherein said nodules are introduced over the length of the well.

36. (New) The method of claim 30, wherein said nodules are introduced over at least one portion of the length of the well and wherein nonbentonite material is introduced into at least one other portion of the length of the well.

37. (New) The method of claim 30, wherein heat is introduced into the well.

38. (New) The method of claim 30, wherein the well contains viscous material and wherein hot water is introduced into the well to reduce the viscosity of said viscous material.

39. (New) The method of claim 38, wherein the hot water is introduced into the well prior to introducing the nodules.

40. (New) The method of claim 31, wherein said nodules are introduced into the bottom of the well by falling from said opening to said bottom.

41. (New) The method of claim 31, wherein said nodules are introduced over the length of the well.

42. (New) The method of claim 31, wherein said nodules are introduced over at least one portion of the length of the well and wherein nonbentonite material is introduced into at least one other portion of the length of the well.

43. (New) The method of claim 31, wherein heat is introduced into the well.

44. (New) The method of claim 31, wherein the well contains viscous material and wherein hot water is introduced into the well to reduce the viscosity of said viscous material.

45. (New) The method of claim 44, wherein the hot water is introduced into the well prior to introducing the nodules.

46. (New) The method of claim 31, wherein the well contains saline water.
47. (New) The method of claim 33, wherein said nodules are introduced into the bottom of the well by falling from said opening to said bottom.
48. (New) The method of claim 33, wherein said nodules are introduced over the length of the well.
49. (New) The method of claim 33, wherein said nodules are introduced over at least one portion of the length of the well and wherein nonbentonite material is introduced into at least one other portion of the length of the well.
50. (New) The method of claim 33, wherein heat is introduced into the well.
51. (New) The method of claim 33, wherein the well contains viscous material and wherein hot water is introduced into the well to reduce the viscosity of said viscous material.
52. (New) The method of claim 51, wherein the hot water is introduced into the well prior to introducing the nodules.
53. (New) The method of claim 33, wherein the well contains saline water.